

Republic of Lebanon  
National Council for Scientific Research

# Provisional Seismological Bulletin

from the

## NATIONAL SEISMIC NETWORK

March

2020

Prepared by  
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## GENERAL BULLETIN INFORMATION

The National Centre for Geophysical Research is a governmental agency established 1975 in Lebanon by the National Council for Scientific Research (CNRS). The mission of the Centre, among other assignments, is the monitoring of seismic activity within the national territory. Currently, the national seismic network is under deployment; it has been officially registered as GRAL, an acronym for Geophysical Research Arrays of Lebanon. Station coordinates and status are given below.

Since 1993, the Centre has been participating in a regional initiative by the UNESCO and the USGS known as RELEMR, i.e. Reducing Earthquake Losses in the Eastern Mediterranean Region.

Within this framework, the Centre routinely contributes to the database set up for this purpose and maintained by the Euro-Mediterranean Seismological Centre (EMSC). For coherence, the Centre has adopted the recommended seismic analysis system SEISAN developed by Jens Havskov and Lars Ottemoller from the University of Bergen, Norway.

The localization program currently used for locating earthquakes is Hypocenter (Lienert et al., 1986). Plane parallel layers are assumed for local and regional events, while the IASPEI travel time tables are used for distant events.

The velocity model used for all local and regional events is the one currently adopted by the RELEMR initiative.

P-wave velocity (km/sec)	depth to top of layer (km)
6.2	0.0
6.8	14.0
8.05	34.0
8.25	50.0
8.5	80.0

Magnitudes are calculated from the coda duration. The coda wave magnitude is estimated via the formula:

$$M_c = 0.08 + 1.63 * \log_{10}(T) + 0.0009 * D.$$

where T is the coda duration (sec) and D is the epicentral distance (km). The coefficients above were adopted at the outset of our Centre in 1980 and thus are still in use for the sake of continuity.

All available coda values are used for magnitude calculations. No station corrections are used for either travel times or magnitudes calculations. The  $V_p/V_s$  velocity ratio used in both layered models above is 1.74.

As a general policy, neither depths, nor epicenters, are fixed unless stated otherwise since this might restrict later use of the data. Consequently, some event locations might be unrealistic such as zero depth earthquakes or teleseismic locations off by 1000 km. However, the locations are based on the available data and reflect the localization procedure and the models used.

## STATIONS USED

The stations listed below are operated by the National Centre for Geophysical Research. They constitute the basic setup of the National Seismic Network of Lebanon.

However, readings from other cooperating agencies are also used in locating the events and thus more stations may appear in the event lists than in the station list; it is worth mentioning the systematic use of arrival times from the Cypriot seismic network CSS in order to constrain events corresponding to an active zone off the Lebanese shorelines.

STATION	LATITUDE	LONGITUDE	HEIGHT (m)	NAME	COMMENTS
BHL	3354.25N	3539.25E	1000	BHANNES	Opened May 1980
HWQ	3416.68N	3556.78E	1161	HAWQA	Opened Jan 2001
MATL	3329.32N	3519.78E	5	MATARIH	Nov2000-Sep2012
FKH	3414.69N	3624.61E	1152	FAKEHEH	Opened Dec 2004
RCY	3329.79N	3550.14E	1370	RACHAYA	Opened Jun 2006
BEYL	3352.30N	3529.59E	49	BEIRUT	Opened Jul 2006
NAQL	3307.02N	3508.46E	83	NAQOURA	Jul2008-Jan2012
DQRL	3342.34N	3534.21E	963	DEIR QAMAR	Opened Mar 2010
QRWL	3332.86N	3540.93E	875	QARAOUN	Opened Oct 2011
SHBL	3320.90N	3544.63E	1422	CHEBAA	Opened Oct 2011
ZAHL	3351.48N	3553.12E	1211	ZAHLE	Opened Aug 2015
BEIL	3432.50N	3611.08E	572	BEINO	Opened Jan 2017
SAIL	3334.52N	3524.09E	159	SAIDA	Opened Jan 2020
CPTL	3353.47N	3528.60E	32	GRAYTEM	Opened Mar 2020

## REGIONAL AND DISTANT EARTHQUAKES

Because regional events and teleseisms are not localized, but simply identified, EMSC determination data are given along with phase arrivals (in general first arrival) at the stations of our network.

## MACROSEISMIC DATA

Macroseismic data, if available, are included in the bulletin.

## MONTHLY EPICENTER MAPS

Maps will be found on the last page.

## ELECTRONIC PUBLICATION

This provisional bulletin is available for download in pdf format on:  
<http://www.cnrs.edu.lb/grdownload.html>

## REFERENCES

- Havskov, J. and Ottemoller, L. (2001). SEISAN: The Earthquake Analysis Software. -version 7.2-  
Institute of Solid Earth Physics, University of Bergen.  
<http://www.ifjf.uib.no/seismo/software/seisan.html>
- Lienert, B.R., Berg, E. and Frazer, L.N. (1986). Hypocenter: An earthquake location method using centered, scaled, and adaptively least squares. Bull. Seism. Soc. Am., 76., pp 771-783.

## Abbreviations:

TIME: Origin time in UTC (hr. min. and sec.) or data file onset time if event is not located.

LAT: Latitude of epicenter

LON: Longitude of epicenter

DEPTH: Focal depth in kilometer (trailing F indicates fixed depth)

AGENCY: REL throughout the bulletin, aka. REsearch Lebanon

MAGNITUDES: Up to 3 different magnitudes can be given followed by type and reporting agency, e.g. 3.1 MC REL - coda magnitude calculated according to above mentioned formula.

EMSC: Euro-Mediterranean Seismological Centre.

OT: Origin Time

RMS: Root mean square value of travel time residuals

STAT: Station code

CO: Component; S:short period, L:long period, B:broadband.

DIST: Epicenter distance (km)

AZI: Azimuth from source to station

PHAS: Phase; The first letter characterizes onset E(mergent) or I(mpulsive)

P: Polarity ( C for compression, D for dilatation )

HR: Hour

MN: Minute

SECON: Seconds

TRES: Residual (seconds)

CODA: Signal duration in seconds

AMPL: Ground Amplitude ( $0.5 * (\text{peak to peak})$ ), (nm) at period PERI

PERI: Period where amplitude is measured

BAZ: Back azimuth (station to event)

ARES: Back azimuth residual

VELO: Apparent phase velocity (km/sec)

WT: Weight of phase in the location

\*: An asterisk before the phase arrival time implies a potential timing error. If an S phase is read, differential S-P times will be used in the hypocenter location.

March 1 2020 Hour: 14:34 49.9 Agency: REL Regional

EMSC OT=14:34:49.9 37.26N 37.97E 11Km M=3.4 CENTRAL TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1435	37.85								
FKH	SZ			EP		1435	39.91								
HWQ	BZ			EP		1435	40.83								

March 1 2020 Hour: 18:13 1.4 Agency: REL Distant

EMSC OT=18:13:01.4 20.71S 178.21W 538Km M=5.3 FIJI REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1831	43.98								
HWQ	BZ			EP		1831	44.27								
ZAHL	SZ			EP		1831	45.11								
BHL	BZ			EP		1831	45.42								
RCY	SZ			EP		1831	45.32								
DQRL	SZ			EP		1831	46.02								
QRWL	SZ			EP		1831	45.86								

March 2 2020 Hour: 7:30 11.2 Agency: REL Regional

EMSC OT=07:30:11.2 38.27N 38.83E 7Km M=3.5 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		731	17.62								
FKH	SZ			EP		731	19.93								
HWQ	BZ			EP		731	21.85								
RCY	SZ			EP		731	31.89								
QRWL	SZ			EP		731	30.56								

March 2 2020 Hour: 14:52 50.9 Agency: REL Regional

EMSC OT=14:52:50.9 38.22N 38.83E 5Km M=3.9 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1453	57.72								
FKH	SZ			EP		1454	0.04								
HWQ	BZ			EP		1454	2.40								
ZAHL	SZ			EP		1454	8.37								
BHL	BZ			EP		1454	9.02								
DQRL	SZ			EP		1454	12.55								
RCY	SZ			EP		1454	12.87								
QRWL	SZ			EP		1454	13.60								

March 2 2020 Hour: 21:13 49.9 Lat: 33.70N Lon: 35.77E Depth: 7 Agency: REL Local  
Magnitudes: 3.2MC REL Rms: 0.0 secs

WEST BEKAA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	19	271	EP		2113	53.25	0.07	75						1.0
DQRL	SN	19	271	ES		2113	55.62	-0.00							1.0
QRWL	SZ	19	206	EP		2113	53.22	-0.01							1.0
ZAHL	SZ	20	31	EP		2113	53.46	0.06							1.0
RCY	SZ	24	166	EP		2113	53.90	-0.03							1.0
RCY	SN	24	166	ES		2113	56.93	0.01							1.0
BHL	BZ	25	334	EP		2113	54.02	-0.09							1.0
BEYL	SZ	32	306	EP		2113	55.18	0.01							1.0
HWQ	BZ	66	14	EP		2114	0.56	-0.02							1.0
BEIL	SZ	101	22	EP		2114	6.11	0.02							1.0

March 3 2020 Hour: 0:44 53.0 Lat: 34.20N Lon: 35.70E Depth: 33 Agency: REL Local  
Magnitudes: 3.3MC REL Rms: 0.1 secs

BATROUN REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ	24	69	EP		044	59.48	0.05	85						1.0
HWQ	BN	24	69	ES		045	4.18	-0.02							1.0
BHL	BZ	33	188	EP		045	0.11	-0.18							1.0
BEYL	SZ	41	208	EP		045	1.18	0.08							1.0
ZAHL	SZ	41	156	EP		045	1.26	0.01							1.0

ZAHL	SN	41	156	ES		045	7.38	0.02									1.0
DQRL	SZ	56	193	EP		045	3.10	0.05									1.0
BEIL	SZ	58	49	EP		045	3.30	0.01									1.0
QRWL	SZ	72	182	EP		045	5.14	0.02									1.0
RCY	SZ	79	171	EP		045	5.92	-0.07									1.0
RCY	SN	79	171	ES		045	15.63	0.02									1.0

**March 4 2020 Hour: 2:11 42.4 Agency: REL Regional**

**EMSC OT=02:11:42.4 38.28N 38.81E 7Km M=3.3 EASTERN TURKEY**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		212	49.57								
HWQ	BZ			EP		212	53.95								
ZAHL	SZ			EP		212	59.82								
DQRL	SZ			EP		213	3.41								

**March 4 2020 Hour: 15:47 46.7 Lat: 33.67N Lon: 37.12E Depth: 3 Agency: REL Regional**

**Magnitudes: 3.3MC REL**

**Rms: 0.1 secs**

**SYRIA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	91	314	EP		1548	1.43	-0.03							1.0
ZAHL	SZ	116	281	EP		1548	5.48	0.02							1.0
RCY	SZ	121	261	EP		1548	6.07	-0.09							1.0
HWQ	BZ	128	302	EP		1548	7.13	-0.03							1.0
HWQ	BN	128	302	ES		1548	22.25	-0.05							1.0
BEIL	SZ	129	318	EP		1548	7.38	-0.01	79						1.0
BEIL	SN	129	318	ES		1548	22.75	0.04							1.0
BHL	BZ	138	281	EP		1548	8.75	0.05							1.0
DQRL	SZ	144	272	EP		1548	9.60	0.09							1.0

**March 5 2020 Hour: 0:21 27.5 Agency: REL Regional**

**EMSC OT=00:21:27.5 35.24N 27.98E 10Km M=3.3 DODECANESE ISLANDS, GREECE**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		023	4.25								
HWQ	BZ			EP		023	4.48								
ZAHL	SZ			EP		023	4.91								
BEIL	SZ			EP		023	6.12								
RCY	SZ			EP		023	5.23								

**March 5 2020 Hour: 19:48 8.2 Lat: 34.58N Lon: 33.09E Depth: 33 Agency: REL Regional**

**Magnitudes: 3.4MC REL**

**Rms: 0.1 secs**

**CYPRUS REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	248	112	EP		1948	42.26	0.01							1.0
DQRL	SN	248	112	ES		1949	7.38	-0.04							1.0
BHL	BZ	248	107	EP		1948	42.19	0.01							1.0
HWQ	BZ	264	97	EP		1948	44.26	-0.02							1.0
HWQ	BN	264	97	ES		1949	10.98	0.03							1.0
ZAHL	SZ	270	107	EP		1948	44.97	0.05							1.0
RCY	SZ	280	115	EP		1948	46.26	-0.03							1.0
RCY	SN	280	115	ES		1949	14.46	0.02							1.0
BEIL	SZ	284	90	EP		1948	46.27	-0.35	78						0.2
BEIL	SN	284	90	ES		1949	15.01	-0.01							1.0

**March 5 2020 Hour: 21: 6 27.6 Agency: REL Regional**

**EMSC OT=21:06:27.6 38.28N 38.81E 5Km M=3.7 EASTERN TURKEY**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		21 7	33.44								
HWQ	BZ			EP		21 7	38.27								
ZAHL	SZ			EP		21 7	44.11								
BHL	BZ			EP		21 7	45.05								
DQRL	SZ			EP		21 7	48.44								
RCY	SZ			EP		21 7	48.62								

March 10 2020 Hour: 2:12 25.4 Lat: 35.17N Lon: 32.64E Depth: 0 Agency: REL Regional  
Magnitudes: 3.5MC REL Rms: 0.1 secs

CYPRUS REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	314	120	EP		213	10.59	-0.03							1.0
HWQ	BZ	319	107	EP		213	11.22	0.07							1.0
HWQ	BN	319	107	ES		213	44.94	-0.05							1.0
BEIL	SZ	332	101	EP		213	12.66	-0.05	79						1.0
ZAHL	SZ	332	115	EP		213	12.69	-0.09							1.0
BEIL	SN	332	101	ES		213	47.74	0.05							1.0
QRWL	SZ	333	122	EP		213	12.93	0.06							1.0
RCY	SZ	348	121	EP		213	14.83	0.04							1.0

March 10 2020 Hour: 20:44 37.8 Lat: 34.05N Lon: 34.74E Depth: 27 Agency: REL Local  
Magnitudes: 2.8MC REL Rms: 0.0 secs

OFFSHORE CENTRAL LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	86	116	EP		2044	51.74	0.02							1.0
BHL	BZ	86	101	EP		2044	51.77	0.03							1.0
QRWL	SZ	104	123	EP		2044	54.20	-0.07							1.0
ZAHL	SZ	108	101	EP		2044	54.92	0.04							1.0
HWQ	BZ	114	77	EP		2044	55.59	-0.01	38						1.0
HWQ	BN	114	77	ES		2045	8.76	0.01							1.0
RCY	SZ	119	121	EP		2044	56.23	-0.00							1.0
RCY	SN	119	121	ES		2045	9.85	0.00							1.0
BEIL	SZ	144	67	EP		2044	59.21	-0.01							1.0
BEIL	SN	144	67	ES		2045	15.03	-0.02							1.0

March 10 2020 Hour: 23:3 7.8 Lat: 33.68N Lon: 35.83E Depth: 17 Agency: REL Local  
Magnitudes: 2.5MC REL Rms: 0.1 secs

WEST BEKAA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	20	15	EP		23 3	12.11	-0.03							1.0
QRWL	SZ	20	222	EP		23 3	12.02	-0.10	31						1.0
RCY	SZ	21	178	EP		23 3	12.28	0.05							1.0
RCY	SN	21	178	ES		23 3	15.53	0.01							1.0
DQRL	SZ	24	276	EP		23 3	12.59	-0.00							1.0
DQRL	SN	24	276	ES		23 3	16.25	0.09							1.0
BHL	BZ	29	327	EP		23 3	13.16	-0.12							1.0
HWQ	BZ	67	9	EP		23 3	18.66	0.02							1.0
BEIL	SZ	101	19	EP		23 3	23.64	0.07							1.0

March 12 2020 Hour: 12:6 20.3 Lat: 33.15N Lon: 35.19E Depth: 0 Agency: REL Local  
Magnitudes: 2.7MC REL Rms: 0.1 secs

SOUR REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	64	46	EP		12 6	30.48	-0.09	38						1.0
DQRL	SZ	71	30	EP		12 6	31.73	-0.02							1.0
RCY	SZ	71	58	EP		12 6	31.91	0.07							1.0
RCY	SE	71	58	ES		12 6	40.31	-0.06							1.0
BHL	BZ	94	27	EP		12 6	35.49	0.03							1.0
ZAHL	SZ	102	40	EP		12 6	36.80	0.10							1.0
HWQ	BZ	143	29	EP		12 6	43.23	-0.06							1.0
HWQ	BN	143	29	ES		12 7	0.34	0.05							1.0
FKH	SZ	166	43	EP		12 6	46.74	0.12							1.0
BEIL	SZ	180	31	EP		12 6	48.44	-0.15							1.0

**March 14 2020 Hour: 10:11.6.8** Agency: REL Distant  
**EMSC OT=10:01:16.8 27.55S 175.64W 10Km M=6.3 KERMADEC ISLANDS REGION**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 BEIL SZ EP 1021 12.52  
 HWQ BZ EP 1021 12.81  
 ZAHL SZ EP 1021 14.40  
 BHL BZ EP 1021 13.44  
 RCY SZ EP 1021 13.48  
 DQRL SZ EP 1021 14.02  
 QRWL SZ EP 1021 13.82

**March 14 2020 Hour: 22:38 56.0 Lat: 35.84N Lon: 35.81E Depth: 6 Agency: REL Regional**  
**Magnitudes: 3.3MC REL Rms: 0.1 secs**

**SYRIA REGION**

STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 BEIL SZ 148 166 EP 2239 19.34 0.11 77 1.0  
 BEIL SN 148 166 ES 2239 36.32-0.10 1.0  
 HWQ BZ 174 176 EP 2239 22.93-0.11 1.0  
 HWQ BN 174 176 ES 2239 43.15 0.09 1.0  
 BHL BZ 215 184 EP 2239 28.17-0.04 1.0  
 ZAHL SZ 220 178 EP 2239 28.90 0.08 1.0  
 DQRL SZ 238 185 EP 2239 30.92-0.08 1.0  
 QRWL SZ 254 183 EP 2239 33.12 0.04 1.0

**March 15 2020 Hour: 8:9 29.0 Lat: 33.85N Lon: 35.85E Depth: 4 Agency: REL Local**  
**Magnitudes: 3.3MC REL Rms: 0.1 secs**

**Earthquake was felt**

**ZAHLE REGION**

STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 ZAHL SZ 4 81 EP 8 9 30.01-0.03 92 1.0  
 ZAHL SN 4 81 ES 8 9 30.86 0.01 1.0  
 BHL BZ 19 288 EP 8 9 32.05-0.04 87 1.0  
 BHL BN 19 288 ES 8 9 34.46 0.05 1.0  
 DQRL SZ 30 238 EP 8 9 33.97 0.05 1.0  
 BEYL SZ 33 274 EP 8 9 34.19-0.09 1.0  
 QRWL SZ 37 204 EP 8 9 34.94-0.06 1.0  
 RCY SZ 40 181 EP 8 9 35.48 0.08 1.0  
 HWQ BZ 48 11 EP 8 9 36.80 0.04 1.0  
 HWQ BN 48 11 ES 8 9 42.54 0.00 1.0  
 FKH SZ 68 50 EP 8 9 39.88-0.05 1.0  
 BEIL SZ 83 22 EP 8 9 42.33 0.04 1.0

**March 15 2020 Hour: 8:41 0.8** Agency: REL Regional  
**EMSC OT=08:41:00.8 38.40N 39.05E 7Km M=3.5 EASTERN TURKEY**

STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 BEIL SZ EP 842 10.21  
 FKH SZ EP 842 12.30  
 HWQ BZ EP 842 14.80  
 ZAHL SZ EP 842 20.35  
 BHL BZ EP 842 21.53  
 DQRL SZ EP 842 24.52

**March 15 2020 Hour: 10:35 38.3** Agency: REL Regional  
**EMSC OT=10:35:38.3 37.49N 36.02E 19Km M=4.2 CENTRAL TURKEY**

STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 BEIL SZ EP 1036 19.49  
 HWQ BZ EP 1036 24.12  
 FKH SZ EP 1036 24.50  
 BHL BZ EP 1036 29.31  
 ZAHL SZ EP 1036 30.39  
 DQRL SZ EP 1036 30.87



March 15 2020 Hour: 13:4 14.9 Lat: 33.59N Lon: 35.72E Depth: 11 Agency: REL Local  
Magnitudes: 2.7MC REL Rms: 0.0 secs

WEST BEKAA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	6	218	EP		13	4	17.14	-0.04		42				1.0
QRWL	SN	6	218	ES		13	4	18.88	0.00						1.0
RCY	SZ	15	135	EP		13	4	18.14	0.03						1.0
DQRL	SZ	19	312	EP		13	4	18.63	0.03						1.0
DQRL	SN	19	312	ES		13	4	21.35	0.01						1.0
ZAHL	SZ	33	27	EP		13	4	20.65	0.00						1.0
BHL	BZ	35	350	EP		13	4	20.92	-0.03						1.0

March 15 2020 Hour: 17:27 10.3

Agency: REL Regional

EMSC OT=17:27:10.3 36.14N 31.10E 60Km M=4.5 WESTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1728	15.07								
BEIL	SZ			EP		1728	15.75								
BHL	BZ			EP		1728	15.18								
ZAHL	SZ			EP		1728	16.34								
DQRL	SZ			EP		1728	14.01								
FKH	SZ			EP		1728	19.82								
QRWL	SZ			EP		1728	29.41								
RCY	SZ			EP		1728	24.08								

March 15 2020 Hour: 22:4 26.0

Agency: REL Distant

EMSC OT=22:04:26.0 27.40N 55.41E 10Km M=5.4 SOUTHERN IRAN

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		22	8	34.48							
HWQ	BZ			EP		22	8	35.99							
ZAHL	SZ			EP		22	8	35.77							
BHL	BZ			EP		22	8	37.51							
DQRL	SZ			EP		22	8	39.09							
RCY	SZ			EP		22	8	39.67							

March 15 2020 Hour: 22:59 25.8 Lat: 33.70N Lon: 35.62E Depth: 8 Agency: REL Local  
Magnitudes: 2.3MC REL Rms: 0.0 secs

CHOUF REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	5	274	EP		2259	27.60	0.02		23					1.0
DQRL	SN	5	274	ES		2259	28.84	-0.02							1.0
QRWL	SZ	18	162	EP		2259	29.12	-0.01							1.0
BHL	BZ	23	7	EP		2259	29.77	-0.03							1.0
BHL	BN	23	7	ES		2259	32.74	0.02							1.0
ZAHL	SZ	30	55	EP		2259	30.89	-0.01							1.0
RCY	SZ	30	139	EP		2259	30.99	0.02							1.0

March 16 2020 Hour: 1:53 25.3

Agency: REL Regional

EMSC OT=01:53:25.3 35.38N 26.92E 10Km M=4.2 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		155	10.39								
DQRL	SZ			EP		155	10.17								
ZAHL	SZ			EP		155	11.01								
HWQ	BZ			EP		155	12.06								
QRWL	SZ			EP		155	12.11								
RCY	SZ			EP		155	11.95								
BEIL	SZ			EP		155	12.34								

March 16 2020 Hour: 6:12 34.1 Lat: 33.89N Lon: 35.85E Depth: 0 Agency: REL Local  
Magnitudes: 2.9MC REL Rms: 0.0 secs

ZAHLE REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	5	145	EP		612	34.95	0.00							1.0
BHL	BZ	19	274	EP		612	37.17	0.03							1.0
BHL	BN	19	274	ES		612	39.33	-0.03							1.0
DQRL	SZ	34	232	EP		612	39.60	0.04							1.0
DQRL	SN	34	232	ES		612	43.59	0.01							1.0
QRWL	SZ	42	203	EP		612	40.81	-0.04							1.0
QRWL	SN	42	203	ES		612	45.82	0.01							1.0
HWQ	BZ	43	11	EP		612	41.08	-0.06	53						1.0
RCY	SZ	44	182	EP		612	41.22	-0.03							1.0
FKH	SZ	64	53	EP		612	44.54	0.02							1.0
BEIL	SZ	78	23	EP		612	46.76	0.04							1.0

March 16 2020 Hour: 7:13 57.2

Agency: REL Regional

EMSC OT=07:13:57.2 35.64N 44.24E 10Km M=4.4 IRAQ

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		715	39.09								
BEIL	SZ			EP		715	40.06								
HWQ	BZ			EP		715	43.79								
BHL	BZ			EP		715	48.77								
RCY	SZ			EP		715	49.46								
QRWL	SZ			EP		715	51.33								
DQRL	SZ			EP		715	51.32								

March 16 2020 Hour: 12:35 34.7

Agency: REL Regional

EMSC OT=12:35:34.7 37.45N 36.02E 7Km M=3.6 CENTRAL TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1236	21.47								
FKH	SZ			EP		1236	26.50								
HWQ	BZ			EP		1236	27.37								
QRWL	SZ			EP		1236	37.06								

March 16 2020 Hour: 15:29 7.1

Lat: 33.68N Lon: 37.07E Depth: 0 Agency: REL Regional

Magnitudes: 3.3MC REL

Rms: 0.1 secs

SYRIA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	87	316	EP		1529	21.15	-0.04	88						1.0
ZAHL	SZ	111	281	EP		1529	25.07	0.01							1.0
RCY	SZ	116	260	EP		1529	25.95	0.11							1.0
RCY	SE	116	260	ES		1529	39.65	-0.07							1.0
HWQ	BZ	123	303	EP		1529	26.99	0.03							1.0
BEIL	SZ	126	320	EP		1529	27.27	-0.10							1.0
BEIL	SN	126	320	ES		1529	42.43	0.06							1.0
QRWL	SZ	129	264	EP		1529	27.96	-0.02							1.0
BHL	BZ	133	281	EP		1529	28.60	-0.00							1.0
DQRL	SZ	139	272	EP		1529	29.46	0.01							1.0

March 16 2020 Hour: 21: 4 21.2

Lat: 33.24N Lon: 35.16E Depth: 5 Agency: REL Local

Magnitudes: 2.7MC REL

Rms: 0.0 secs

OFFSHORE SOUTH LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	59	55	EP		21 4	30.84	0.01	37						1.0
DQRL	SZ	64	36	EP		21 4	31.57	-0.04							1.0
DQRL	SN	64	36	ES		21 4	39.30	-0.01							1.0
RCY	SZ	69	65	EP		21 4	32.46	0.07							1.0
RCY	SN	69	65	ES		21 4	40.64	-0.03							1.0
BHL	BZ	87	32	EP		21 4	35.26	0.02							1.0
BHL	BN	87	32	ES		21 4	45.67	0.04							1.0
ZAHL	SZ	96	44	EP		21 4	36.68	-0.06							1.0
HWQ	BZ	136	32	EP		21 4	42.80	-0.03							1.0

BEIL SZ 173 33 EP 21 4 48.18 0.03 1.0

March 16 2020 Hour: 23:36 8.6 Lat: 33.21N Lon: 35.21E Depth: 2 Agency: REL Local  
Magnitudes: 2.9MC REL Rms: 0.0 secs

**SOUR REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	64	31	EP		2336	18.94	-0.00							1.0
DQRL	SN	64	31	ES		2336	26.65	0.02							1.0
RCY	SZ	66	61	EP		2336	19.26	0.03	50						1.0
RCY	SN	66	61	ES		2336	27.11	-0.02							1.0
BHL	BZ	87	28	EP		2336	22.60	-0.05							1.0
ZAHL	SZ	95	41	EP		2336	23.95	0.02							1.0
HWQ	BZ	137	30	EP		2336	30.36	-0.03							1.0
BEIL	SZ	173	31	EP		2336	35.73	0.03							1.0

March 17 2020 Hour: 16: 6 22.7 Agency: REL Distant  
EMSC OT=16:06:22.7 16.06S 172.17W 9Km M=5.8 SAMOA ISLANDS REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1626	12.58								
BHL	BZ			EP		1626	12.58								

March 17 2020 Hour: 18:14 32.8 Agency: REL Regional  
EMSC OT=18:14:32.8 36.95N 27.33E 20Km M=4.4 DODECANESE-TURKEY BORDER REG

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1816	21.28								
BEIL	SZ			EP		1816	22.20								
ZAHL	SZ			EP		1816	21.53								
RCY	SZ			EP		1816	28.67								

March 18 2020 Hour: 17:45 38.0 Agency: REL Distant  
EMSC OT=17:45:38.0 11.04S 115.12E 10Km M=6.3 SOUTH OF BALI, INDONESIA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1758	27.82								
HWQ	BZ			EP		1758	27.03								

March 18 2020 Hour: 22:36 50.8 Lat: 32.07N Lon: 30.65E Depth:123 Agency: REL Regional  
Magnitudes: 3.9MC REL Rms: 0.1 secs

**EASTERN MEDITERRANEAN SEA**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	495	67	EP		2237	54.20	-0.10							1.0
QRWL	SZ	499	70	EP		2237	54.91	0.14							1.0
BHL	BZ	510	65	EP		2237	56.14	0.07							1.0
BHL	BN	510	65	ES		2238	44.35	-0.02							1.0
RCY	SZ	511	71	EP		2237	56.07	-0.15	119						1.0
RCY	SN	511	71	ES		2238	44.65	0.02							1.0
ZAHL	SZ	528	67	EP		2237	58.26	0.06							1.0
HWQ	BZ	551	62	EP		2238	0.87	-0.03							1.0
BEIL	SZ	584	61	EP		2238	4.63	0.00							1.0

March 19 2020 Hour: 15:52 8.0 Lat: 34.19N Lon: 33.89E Depth: 2 Agency: REL Regional  
Magnitudes: 2.9MC REL Rms: 0.0 secs

**EASTERN MEDITERRANEAN SEA**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	181	113	EP		1552	36.34	0.00							1.0
ZAHL	SZ	188	101	EP		1552	37.22	-0.07							1.0
HWQ	BZ	190	87	EP		1552	37.55	0.06							1.0
RCY	SZ	196	113	EP		1552	38.27	-0.03	43						1.0
RCY	SN	196	113	ES		1553	0.73	0.03							1.0
BEIL	SZ	214	79	EP		1552	40.56	0.04							1.0
BEIL	SN	214	79	ES		1553	4.54	-0.03							1.0

March 19 2020 Hour: 17:53 32.2 Agency: REL Regional

EMSC OT=17:53:32.2 38.42N 39.03E 21Km M=5.0 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1754	41.14								
HWQ	BZ			EP		1754	45.53								
ZAHL	SZ			EP		1754	50.92								
BHL	BZ			EP		1754	52.05								
DQRL	SZ			EP		1754	55.76								
RCY	SZ			EP		1754	56.88								
QRWL	SZ			EP		1754	56.54								

March 20 2020 Hour: 1:36 10.6 Agency: REL Distant

EMSC OT=01:36:10.6 34.24S 179.03W 10Km M=5.4 SOUTH OF KERMADEC ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		156	4.66								
HWQ	BZ			EP		156	3.49								

March 20 2020 Hour: 3: 3 13.4 Agency: REL Distant

EMSC OT=03:03:13.4 46.04N 94.01E 10Km M=5.8 WESTERN MONGOLIA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		311	32.68								
HWQ	BZ			EP		311	29.79								

March 20 2020 Hour: 23: 9 21.4 Lat: 33.85N Lon: 35.84E Depth: 0 Agency: REL Local

Magnitudes: 2.7MC REL Rms: 0.0 secs

ZAHLE REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	5	76	EP		23	9	22.21	0.00	41					1.0
BHL	BZ	18	290	EP		23	9	24.29	-0.06						1.0
BHL	BN	18	290	ES		23	9	26.54	0.01						1.0
DQRL	SZ	29	238	EP		23	9	26.22	0.06						1.0
QRWL	SZ	36	204	EP		23	9	27.24	-0.03						1.0
RCY	SZ	39	180	EP		23	9	27.72	0.01						1.0
RCY	SN	39	180	ES		23	9	32.36	-0.01						1.0
HWQ	BZ	49	12	EP		23	9	29.32	0.04						1.0
BEIL	SZ	83	22	EP		23	9	34.82	-0.03						1.0

March 21 2020 Hour: 0:49 51.8 Agency: REL Regional

EMSC OT=00:49:51.8 39.30N 20.62E 7Km M=5.7 GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		052	59.79								
BHL	BZ			EP		052	59.41								

March 22 2020 Hour: 3:51 22.7 Lat: 33.52N Lon: 35.69E Depth: 0 Agency: REL Local

Magnitudes: 2.4MC REL Rms: 0.0 secs

WEST BEKAA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	3	338	EP		351	23.23	-0.04	26						1.0
QRWL	SN	3	338	ES		351	23.68	0.01							1.0
RCY	SZ	13	102	EP		351	24.90	-0.00							1.0
DQRL	SZ	24	330	EP		351	26.59	0.05							1.0
DQRL	SN	24	330	ES		351	29.34	-0.01							1.0
ZAHL	SZ	41	25	EP		351	29.43	0.02							1.0
BHL	BZ	43	355	EP		351	29.58	-0.04							1.0

March 22 2020 Hour: 5:24 2.8 Agency: REL Distant

EMSC OT=05:24:02.8 45.87N 16.02E 10Km M=5.4 CROATIA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		528	26.93								
BHL	BZ			EP		528	27.03								

March 22 2020 Hour: 17:51 46.9 Lat: 34.17N Lon: 36.37E Depth: 10 Agency: REL Local  
Magnitudes: 2.7MC REL Rms: 0.1 secs

BAALBECK REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ	41	288	EP		1751	53.77	0.03							1.0
HWQ	BN	41	288	ES		1751	58.82	-0.01							1.0
BEIL	SZ	45	338	EP		1751	54.32	-0.01	39						1.0
BEIL	SN	45	338	ES		1751	59.84	-0.00							1.0
ZAHL	SZ	57	233	EP		1751	56.09	-0.07							1.0
BHL	BZ	72	246	EP		1751	58.75	0.07							1.0
DQRL	SZ	90	236	EP		1752	1.29	-0.08							1.0
QRWL	SZ	94	223	EP		1752	1.98	0.07							1.0

March 22 2020 Hour: 20:43 8.9 Agency: REL Distant  
EMSC OT=20:43:08.9 0.70S 21.04W 10Km M=5.6 CENTRAL MID-ATLANTIC RIDGE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		2053	36.79								
HWQ	BZ			EP		2053	37.49								

March 23 2020 Hour: 15:21 26.9 Lat: 33.66N Lon: 37.06E Depth: 11 Agency: REL Regional  
Magnitudes: 3.4MC REL Rms: 0.0 secs

SYRIA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	89	318	EP		1521	41.11	-0.00	91						1.0
FKH	SN	89	318	ES		1521	51.56	-0.05							1.0
ZAHL	SZ	111	282	EP		1521	44.43	0.03							1.0
RCY	SZ	115	261	EP		1521	44.98	-0.01							1.0
HWQ	BZ	124	304	EP		1521	46.27	-0.02							1.0
BEIL	SZ	127	321	EP		1521	46.73	-0.00							1.0
BEIL	SN	127	321	ES		1522	1.43	0.05							1.0
BHL	BZ	133	282	EP		1521	47.63	0.01							1.0

March 23 2020 Hour: 20:33 36.7 Agency: REL Distant  
EMSC OT=20:33:36.7 25.31S 179.81E 480Km M=5.3 SOUTH OF FIJI ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		2052	27.38								
HWQ	BZ			EP		2052	26.26								

March 25 2020 Hour: 0:23 32.3 Agency: REL Regional  
EMSC OT=00:23:32.3 37.14N 36.34E 7Km M=3.4 CENTRAL TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		024	15.22								
HWQ	BZ			EP		024	24.88								
ZAHL	SZ			EP		024	24.25								
BHL	BZ			EP		024	27.80								
RCY	SZ			EP		024	30.24								
DQRL	SZ			EP		024	27.63								

March 25 2020 Hour: 2:49 21.1 Agency: REL Distant  
EMSC OT=02:49:21.1 48.98N 157.73E 60Km M=7.5 EAST OF KURIL ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		3 1	35.89								
BHL	BZ			EP		3 1	38.81								

March 25 2020 Hour: 15:19 21.0 Lat: 34.51N Lon: 36.29E Depth: 0 Agency: REL Local  
Magnitudes: 2.9MC REL Rms: 0.0 secs

AKKAR REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ	10	289	EP		1519	22.67	0.05	50						1.0
BEIL	SN	10	289	ES		1519	23.75	-0.05							1.0
FKH	SZ	32	159	EP		1519	26.14	-0.02							1.0
HWQ	BZ	41	230	EP		1519	27.57	-0.01							1.0
HWQ	BN	41	230	ES		1519	32.46	0.03							1.0

ZAHL	SZ	81	207	EP		1519	34.15	-0.01									1.0
BHL	BZ	89	221	EP		1519	35.41	0.01									1.0
DQRL	SZ	111	217	EP		1519	38.90	-0.06									1.0
RCY	SZ	120	200	EP		1519	40.47	0.07									1.0
QRWL	SZ	121	208	EP		1519	40.47	-0.02									1.0

**March 26 2020 Hour: 23:21 20.6 Lat: 34.98N Lon: 35.32E Depth: 3 Agency: REL Regional**  
**Magnitudes: 3.3MC REL Rms: 0.0 secs**

**OFFSHORE SYRIA**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ	93	122	EP		2321	35.61	0.01							1.0
BEIL	SN	93	122	ES		2321	46.72	-0.00							1.0
HWQ	BZ	97	144	EP		2321	36.23	-0.02	81						1.0
HWQ	BN	97	144	ES		2321	47.86	0.01							1.0
BEYL	SZ	124	173	EP		2321	40.53	0.06							1.0
BHL	BZ	124	166	EP		2321	40.32	-0.10							1.0
ZAHL	SZ	135	157	EP		2321	42.16	0.01							1.0
DQRL	SZ	144	171	EP		2321	43.37	0.01							1.0
QRWL	SZ	163	168	EP		2321	46.14	-0.03							1.0
RCY	SZ	172	164	EP		2321	47.57	0.06							1.0

**March 27 2020 Hour: 0:20 6.0 Agency: REL Regional**

**EMSC OT=00:20:06.0 38.42N 39.19E 3Km M=3.8 EASTERN TURKEY**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		021	16.98								
HWQ	BZ			EP		021	21.93								
ZAHL	SZ			EP		021	27.30								
BHL	BZ			EP		021	28.22								
DQRL	SZ			EP		021	32.10								
RCY	SZ			EP		021	32.75								
QRWL	SZ			EP		021	33.26								

**March 27 2020 Hour: 4:28 20.7 Lat: 33.44N Lon: 35.90E Depth: 5 Agency: REL Local**  
**Magnitudes: 2.8MC REL Rms: 0.1 secs**

**LEBANON - SYRIA BORDER REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	9	320	EP		428	22.43	0.04	43						1.0
RCY	SN	9	320	ES		428	23.70	0.03							1.0
QRWL	SZ	23	302	EP		428	24.57	0.03							1.0
DQRL	SZ	43	315	EP		428	27.46	-0.12							1.0
DQRL	SN	43	315	ES		428	32.71	0.01							1.0
ZAHL	SZ	47	359	EP		428	28.15	-0.11							1.0
BHL	BZ	57	337	EP		428	29.87	0.05							1.0
HWQ	BZ	93	3	EP		428	35.75	-0.01							1.0
BEIL	SZ	125	12	EP		428	40.75	0.08							1.0

**March 27 2020 Hour: 6:40 42.0 Agency: REL Distant**

**EMSC OT=06:40:42.0 28.27N 57.24E 10Km M=5.4 SOUTHERN IRAN**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		645	8.83								
HWQ	BZ			EP		645	7.46								

**March 27 2020 Hour: 14:0 4.7 Agency: REL Regional**

**EMSC OT=14:00:04.7 35.78N 28.29E 4Km M=3.5 EASTERN MEDITERRANEAN SEA**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		14	1	39.58							
QRWL	SZ			EP		14	1	40.18							
ZAHL	SZ			EP		14	1	39.87							
BEIL	SZ			EP		14	1	40.72							
RCY	SZ			EP		14	1	41.64							
FKH	SZ			EP		14	1	45.05							

March 27 2020 Hour: 20:38 45.5

Agency: REL Regional

**EMSC OT=20:38:45.5 35.13N 27.98E 10Km M=3.3 DODECANESE ISLANDS, GREECE**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ			EP		2040	22.00								
HWQ	BZ			EP		2040	21.71								
ZAHL	SZ			EP		2040	21.76								
RCY	SZ			EP		2040	22.47								
BEIL	SZ			EP		2040	23.52								

March 28 2020 Hour: 0:57 52.7

Agency: REL Distant

**EMSC OT=00:57:52.7 41.95N 142.33E 69Km M=5.1 HOKKAIDO, JAPAN REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1 9	49.78								
HWQ	BZ			EP		1 9	47.48								

# Epicentral Map of Lebanon

March 2020

